

Memorandum

To: File

From: Tim Luke *TL*

Date: July 20, 2000

Re: Field Investigation – Lower Alder Creek

I visited Water District 34 on July 17, 2000 for several purposes, including investigation and measurement of the Alder Creek Channel below the Darlington Ditch. I was not able to measure the ditch with watermaster Doug Rosenkrance on this date because of some miscommunication between the water district and the irrigation district ditchrider over the weekend. Doug had reduced the release of water to the creek below Darlington Ditch in the prior one to two weeks because he felt that water was not reaching the river due to several beaver dams located near the Alder Creek-Vanous Ditch confluence. Doug had released about 145 inches to the creek from the Darlington Ditch on 7/14 so that he could measure the loss in the creek between the Darlington and Vanous Ditches. The irrigation district ditchrider shut the water off over the weekend (either 7/15 or 7/16) and turned the water back into the Darlington. Doug had wanted the water to run in the channel for at least 24 hours or more before measuring losses. He discovered on the morning of 7/17 that the flow had been turned into the Darlington over the weekend. Doug and I visited the site on the afternoon of 7/17.

Attached are several photographs taken 7/17/00 on the lower end of Alder Creek near the Big Lost River. The photos show several beaver dams that appear to block flow from Alder Creek and the Vanous Ditch from reaching the Big Lost River. I and watermaster Doug Rosenkrance followed a channel starting below the confluence of Alder Creek and Vanous Ditch (where Ellwein diversion pump and head of Houston Grazing lateral are located) to the point where the channel discharges to the river.

A large beaver dam exists at the head of the Houston Grazing Lateral and where the Ellwein diversion pump is located. A second small dam was visible in the Houston Grazing Lateral. Water was backed up behind the beaver dams and almost no flow discharged through the dams. We cut across the Houston Grazing lateral and down to the river and picked up the main channel where it discharges to the river. Just a small trickle of water reached the river from the channel. A second large beaver dam was observed near the river with a large pond and little discharge through the dam. This very

small amount could not be measured with a current meter. We could not follow the entire length of the channel due to the ponds and the dense vegetation. It is possible however that one or more additional dams may exist in the channel between the two dams we observed.

Following inspection of the beaver dams, we drove to the confluence of the Darlington Ditch and Alder Creek. Doug released some water down the creek and planned to measure the creek within a few days. No measuring device had yet been installed in the creek above the Darlington Ditch, but I did see a parshall flume sitting near the creek bank. Doug said that he was trying to get assistance from the irrigation district to install the flume. A large thundershower began while we visited this site. Having finished my other obligations in the area earlier in the day, I then returned to Boise.

I believe the beaver dams at the lower end of the creek probably prohibit much of the flow from reaching the river. This was somewhat difficult to confirm at the time of my visit since there also appeared to be very little inflow to the channel above the dams.